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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/404,427  | 09/23/1999  | SHINJI NODA          | 450127-02216        | 8354             |
| 20999   | 7590        | 12/15/2004           | EXAMINER            |                  |
| FROMMER LAWRENCE & HAUG<br>745 FIFTH AVENUE- 10TH FL.<br>NEW YORK, NY 10151 |             |                      | AKPATI, ODAICHE T   |                  |
|   |             |                      | ART UNIT            | PAPER NUMBER     |
|   |             |                      | 2135                |                  |

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 09/404,427             |  | NODA, SHINJI        |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Tracey Akpati          |  | 2135                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 8/24/2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-13,15-23 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-13,15-23 and 25-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/3/04</u>  | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

1. Claims 1-2, 4-13, 15-23 and 25-32 are pending due to an RCE filed 8/24/2004. Claims 1, 12 and 22 have been amended. This action is non-final.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-9, 11, 22-23, 25-30, 32 rejected under 35 U.S.C. 103(a) as being unpatentable over Kutaragi et al (6122739) in view of Jones et al (6363164 B1).

With regards to Claim 1, Kutaragi et al meets the limitation “performing an absolute authentication process for authenticating a recording medium with information for authentication being recorded in a predetermined position therein, according to a first rule at a predetermined time; and wherein said first rule is that normal authentication is declared in said absolute authentication process if the information for authentication is detected as being recorded in said predetermined position ” on column 1, lines 32-40; and “executing a program transferred from said recording medium if normal authentication is declared in said absolute authenticating process” on column 2, lines 18-36; and “performing an arbitrary authentication process for authenticating said recording medium according to a second rule at an arbitrary time” on column 2, lines 8-12. Kutaragi et al however does not meet the following limitation.

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The limitation of “while executing said program, wherein said second rule is that normal authentication is declared in said arbitrary authentication process if the information for authentication is detected as being not recorded in arbitrary positions other than said predetermined position” is met by Jones et al in the abstract and on paragraphs 172, 173 and 177. The abstract talks about the presence of a discrimination unit. This implies that the discrimination unit discriminates between information that reveals or fails to reveal authenticity of the currency bill. In paragraph 173, the location of the thread within the bill is used as an authenticating feature. In paragraph 177, normal authentication is declared when the threads, i.e. the authenticating feature, are not found in the center of the bill, i.e. in an area where it should not occur. Hence, the absence of the thread in an area it is not supposed to be present is interpreted as an authentic bill.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Jones et al within the system of Kutaragi because checking an area of the disc where an authenticating feature should be absent leads to a more thorough and reliable authentication process.

With regards to Claim 2, the limitation “wherein said absolute authentication process is performed when said recording medium starts being accessed for the first time, and said arbitrary authentication process is performed at least once after said absolute authentication process” is met by Kutaragi on column 2, lines 4-17.

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With regards to Claim 4, the limitation “wherein said absolute authentication process comprises an authentication information detecting process for detecting the information recorded in said predetermined position when said recording medium starts being accessed” is met by Kutaragi, column 1, line 32-38.

The limitation “an absolute decision process for declaring normal authentication if the detected information comprises information for authentication” is inherently met by Kutaragi, column 1, lines 32-38 and column 3, lines 8-13.

The limitation “said arbitrary authentication process comprises an arbitrary information detecting process for detecting information from an arbitrary position except said predetermined position on said recording medium” is met by Kutaragi et al, column 2, lines 61-67. The reference here discusses checks performed in the TOC area of the disc for a wobbled code. Since first step of checking a predetermined location for a security code (Kutaragi, column 1, lines 32-38) has already been performed, then this next step naturally should deal with checking the other predetermined areas or TOC area of the disc for the video image. Kutaragi however does not discuss an arbitrary authentication process that declares a normal authentication when the authenticating information is not found. Jones et al discloses this as discussed below.

The limitation “an arbitrary decision process for declaring normal authentication if the detected information does not comprise information for authentication” is met by Jones et al, abstract and paragraph 172-173, 177. The abstract talks about the presence of a discrimination unit. This implies that the discrimination unit discriminates between information that reveals or fails to reveal authenticity of the currency bill. In paragraph 177, normal authentication is declared when the threads, i.e. the authenticating feature, are not found in the center of the bill,

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i.e. in an area where it should not occur. Hence, the absence of the thread in an area it is not supposed to be present is interpreted as an authentic bill.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Jones et al to the teachings of Kutaragi because checking an area of the disc where an authenticating feature should not be in leads to a more thorough and reliable authentication process.

With regards to Claim 5:

The limitation “wherein said first rule in said absolute authentication process is that normal authentication is declared if a signal indicating that the information for authentication is recorded in said predetermined position is received” is inherently met by Kutaragi, column 1, lines 32-40. Kutaragi however does not disclose an arbitrary authentication process that declares a normal authentication when the authenticating information is not found. Jones et al however discloses this as shown below.

The limitation “said second rule in said arbitrary authentication process is that normal authentication is declared if a signal indicating that the information for authentication is not recorded is received” is met by Jones et al, abstract and paragraph 172-173, 177. In paragraph 177, normal authentication is declared when the threads, i.e. the authenticating feature, are not found in the center of the bill, i.e. in an area where it should not occur. Hence, the absence of the thread in an area it is not supposed to be present is interpreted as an authentic bill.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Jones et al to the teachings of Kutaragi because checking

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an area of the disc where an authenticating feature should not be in leads to a more thorough and reliable authentication process.

With regards to Claim 6:

The limitation “comprising the step of employing access means for accessing said recording medium and outputting a normal signal if the information for authentication is recorded in said predetermined position” is met by Kutaragi, column 1, lines 32-40.

The limitation “said absolute authentication process comprising an absolute decision process for declaring normal authentication if said normal signal is received” is inherently met by Kutaragi, column 2, lines 4-17. Kutaragi however does not disclose an arbitrary authentication that indicates an abnormal authentication whenever a normal signal is received. Jones however discloses this as discussed below.

The limitation “said arbitrary authentication process comprising an arbitrary decision process for declaring an abnormal authentication if said normal signal is received” is met by Jones et al, abstract and paragraph 172-173. Jones implies that if the threads are found in the areas that they are not expected to be in, a normal signal is sent out. This normal signal implies that the authenticating feature, i.e. the thread is absent which can be interpreted as an abnormal authentication.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Jones et al to the teachings of Kutaragi because checking an area of the disc where an authenticating feature should be absent leads to a more thorough and reliable authentication process.

With respect to Claims 7 and 28, the limitation “said recording medium comprises a disk-type recording medium, the information for authentication being modulated radially of said recording medium and recorded therein” is met by Kutaragi on column 1, lines 63-67 and column 2, lines 1-3.

With respect to Claim 8:

The inherited limitation regarding the absolute and arbitrary authentication methods regarding Claim 8 is met by Kutaragi and Jones et al and has already been discussed in Claims 1 and 4.

The limitation “wherein said recording medium comprises a disk-type recording medium, the information for authentication being modulated radially of said recording medium and recorded therein” is met by Kutaragi, column 1, lines 63-67 and column 2, lines 1-3.

The limitation “wherein said absolute authentication process and said arbitrary authentication process comprise the steps of detecting a modulated component from said recording medium; detecting the information for authentication from said modulated component; and deciding whether the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position” is met by Kutaragi, column 2, lines 4-12.

The limitation “outputting a normal signal if the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position” is inherently met by Kutaragi, column 2, lines 12-23.



It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Jones et al to the teachings of Kutaragi because checking an area of the disc where an authenticating feature should be absent leads to a more thorough and reliable authentication process.

With regards to Claim 9, its limitation is similar to Claim 8 limitation. The difference is that Claim 9 further limits the access means described in claim 6. The access means necessary to access and manipulate the recording medium is described in Kutaragi, column 1, lines 38-40.

With regards to Claim 11, the inherited limitation regarding absolute and arbitrary authentication has already been discussed in Claim 1. The limitation “displaying information representing an authenticated result of either said absolute authentication process or said arbitrary authentication process” is met by Kutaragi on column 4, lines 59-61.

With regards to Claim 22, the limitation “an entertainment apparatus for performing processing operations using programs and data reproduced from a recording medium” is met by Kutaragi et al, on column 3, lines 55-67 and column 4, lines 1-22. Further limitation is similar to Claim 1 limitation and hence its rejection can be found therein.

With regards to Claim 23, the limitation “wherein said absolute authentication means comprises means for performing said absolute authentication process according to said first rule when said recording medium starts being accessed for the first time, and said arbitrary authen-

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tication means comprises means for performing said arbitrary authentication process according to said second rule at least once after said absolute authentication process” is met by Kutaragi et al, column 2, lines 4-17.

With regards to Claim 25, its limitation is similar to Claim 4 limitation and hence has already been discussed above.

With regards to Claim 26, its limitation is similar to Claim 5 limitation and hence has already been discussed above.

With regards to Claim 27, its limitation is similar to Claim 6 limitation and hence has already been discussed above.

With regards to Claim 29, its limitation is similar to Claim 8 limitation and hence has already been discussed above.

With regards to Claim 30, its limitation is similar to Claim 9 limitation and hence has already been discussed above.

With regards to Claim 32, its limitation is similar to Claim 11 limitation and hence has already been discussed above.

Claims 12, 13 , 15, 16, 17 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timmermans et al (5737286) in view of Jones et al (6,363,164 B1) in further view of Kutaragi et al (6122739)

With regards to Claim 12, Timmermans et al meets the limitation of “disk playback apparatus for playing back information on a disk-type recording medium, comprising absolute

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authentication means for performing an absolute authentication process for authenticating a recording medium with information for authentication being recorded in a predetermined position therein, according to a first rule at a predetermined time” on column 9, lines 44-50; and “wherein said first rule is that normal authentication is declared in said absolute authentication process if the information for authentication is detected as being recorded in said predetermined position” on column 8, lines 16-20; column 3, lines 44-54, 57-64; and “arbitrary authentication means for performing an arbitrary authentication process for authenticating said recording medium according to a second rule at an arbitrary time while said program is executing” on column 9, lines 43-48. Timmermans et al however does not meet the following limitation.

Jones et al meets the limitation of “wherein said second rule is that normal authentication is declared in said arbitrary authentication process if the information for authentication is detected as being not recorded in arbitrary positions other than said predetermined position” on paragraphs 172, 173 and 177. Timmermans et al in view of Jones et al however does not meet the following limitation.

The limitation of “executing means for executing a program transferred from said recording medium if normal authentication is declared in said absolute authenticating process” is met by Kutaragi et al on column 9, lines 43-48.

It would have been obvious to combine the teachings of Kutaragi et al within the combination of Timmermans et al and Jones et al because execution of a program after normal authentication is declared from the absolute authenticating step gives the user of the disc a final warning that is meant to deter an illegitimate user from viewing the copyrighted/protected information.

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With regards to Claim 13, the limitation “said absolute authentication means comprises means for performing said absolute authentication process according to said first rule when said recording medium starts being accessed for the first time, and said arbitrary authentication means comprises means for performing said arbitrary authentication process according to said second rule at least once after said absolute authentication process” is met by Timmermans et al on column 8, lines 16-20 and column 3, lines 44-54 and 57-64.

With regards to Claim 15,

The limitation “said absolute authentication means comprises authentication information detecting means for detecting the information recorded in said predetermined position when said recording medium starts being accessed, and absolute decision means for declaring normal authentication if the detected information comprises information for authentication” is met by Timmermans et al as already discussed in Claim 12 rejection. Timmermans et al in view of Kutaragi et al however does not discuss an arbitrary authentication process that declares a normal authentication if the authentication information is not found. However, Jones et al discloses this.

The limitation “said arbitrary authentication means comprises arbitrary information detecting means for detecting information from an arbitrary position except said predetermined position on said recording medium, and arbitrary decision means for declaring normal authentication if the detected information does not comprise information for authentication” is met by Jones et al, abstract and paragraphs 172-173 and 177. Paragraph 177 talks about looking

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at an area other than the predetermined position for location of fluorescing threads. The absence of such fluorescing threads in the center of the bill will signify a normal authentication.

It would have been obvious to combine the teachings of Kutaragi et al within the combination of Timmermans et al and Jones et al because execution of a program after normal authentication is declared from the absolute authenticating step gives the user of the disc a final warning that is meant to deter an illegitimate user from viewing the copyrighted/protected information.

With regards to Claim 16, its rejection is contained in Claim 12 rejection and hence its rejection can be found above.

With regards to Claim 17:

The limitation "access means for accessing said recording medium and outputting a normal signal if the information for authentication is recorded in said predetermined position" is met by Timmermans et al, column 9, lines 44-47, 51-53, column 3, lines 51-54.

The limitation "said absolute authentication means comprising absolute decision means for declaring normal authentication if said normal signal is received" is met by Timmermans et al on column 3, lines 51-54. Timmermans et al in view of Kutaragi et al however does not discuss an arbitrary authentication process that declares an abnormal authentication when a normal signal is received. Jones however discloses this.

The limitation "said arbitrary authentication means comprising arbitrary decision means for declaring an abnormal authentication if said normal signal is received" is met by Jones et al,

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abstract and paragraph 172-173. Jones implies that if the threads are found in the areas that they are not expected to be in, a normal signal is sent out. This normal signal implies that the authenticating feature, i.e. the thread is absent which can be interpreted as an abnormal authentication.

It would have been obvious to combine the teachings of Kutaragi et al within the combination of Timmermans et al and Jones et al because execution of a program after normal authentication is declared from the absolute authenticating step gives the user of the disc a final warning that is meant to deter an illegitimate user from viewing the copyrighted/protected information.

With regards to Claim 21, the limitation "further comprising means for forcibly ending a processing being executed if either said absolute authentication process performed by said absolute authentication means or said arbitrary authentication process performed by said arbitrary authentication means does not result in normal authentication" is met by Timmermans et al, column 6, line 46-53.

Claims 10 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kutaragi et al (6122739) in view of Jones et al (6,363,164 B1) in further view of Timmermans et al (5737286).

With respect to Claim 10, the inherited limitation regarding absolute and arbitrary authentication processes is met by Kutaragi et al in view of Jones et al and has already been discussed in Claim 1. The limitation "forcibly ending a processing being executed if either said

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absolute authentication process or said arbitrary authentication process does not result in normal authentication” is met by Timmermans et al, column 6, line 46-53.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Timmermans et al to the combination of Kutaragi et al and Jones et al because a process is needed to evict the illegal disc so as to prevent it from being illegally copied or played.

With respect to Claim 31, its limitation is similar to Claim 10 and hence its rejection is found above in Claim 10 rejection.

Claims 18, 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timmermans et al (5737286) in view of Jones et al (6363164 B1) in further view of Kutaragi et al (6122739).

With regards to Claim 18, the inherited limitation regarding the disk playback apparatus possessing absolute and arbitrary authentication processes has already been discussed in Claim 12 rejection and is met by Timmermans et al in view of Jones et al.

Furthermore, the limitation “the information for authentication is modulated radially of said recording medium and recorded therein” is met by Kutaragi et al, column 1, lines 63-67 and column 2, lines 1-3.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the system of Kutaragi et al within the combination of Timmermans et al and Jones et al so as to store the authentication information on the recording medium.

With regards to Claim 19, the inherited limitation of signaling a normal authentication when the authenticating information is not found is already discussed in Claim 12.

The limitation “detecting means for detecting the information for authentication from said modulated component” is met by Timmermans et al on column 9, lines 56-60.

The limitation “authentication decision means for deciding whether the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position, and outputting a normal signal if the detected information for authentication is in agreement with predetermined information and recorded in said predetermined position” is met by Timmermans et al on column 8, lines 16, 24-28. The combination of Timmermans et al and Jones et al however does not discuss a disk playback apparatus having a radially modulated onto the recording medium. Kutaragi et al discloses this.

The limitation “disk playback apparatus according to claim 12, wherein the information for authentication is modulated radially of said recording medium and recorded therein, and wherein said absolute authentication means and said arbitrary authentication means comprise...” is met by Kutaragi et al, column 3, lines 57-59 and column 1, lines 63-67, column 2, lines 1-3.

The limitation “modulated component detecting means for detecting a modulated component from said recording medium” is met by Kutaragi et al, column 1, lines 63-67 and



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column 2, lines 1-8. The reading of the modulated physical offset in the radial direction of the recording medium implies the existence of a detecting means that performs this function.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the system of Kutaragi et al within the combination of Timmermans et al and Jones et al so as to effectively read and be able to access the authentication information from the disc.

With regards to Claim 20, the limitation is similar to Claim 19 and hence its rejection can be found above. The only difference is that Claim 20 possesses an access means, which can be considered to be inherent within the references cited for Claim 19 rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tracey Akpati whose telephone number is 571-272-3846. The examiner can normally be reached on 8.30am-6.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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